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ABSTRACT

This paper considers the setting of evaluation from the perspective of the situations and stages of problem solving in which institutional leaders might call for the assistance of evaluators. This discussion should provide evaluators with a framework to understand and adjust their interactions with the environmental context of the evaluation. R. Heifetz has posited three types of situations for institutional leaders: (1) clear problem and clear solution; (2) clear problem and unclear solution; and (3) unclear problem and unclear solution. For this discussion, a problem solving process is defined that contains five steps, from problem definition to making changes. Another aspect of the situation in which institutional leaders might or would seek the assistance of evaluators is the definition of evaluation whether it determines the extent to which goals have been accomplished, provides descriptive information, or judges the merits of a program or components. Evaluators have different roles to play in the institutional setting of their work, and their roles depend on the situation. When there is clarity about the problem and the solution, the work is within purposes that are summative or formative, and thus basically technical. When there is lack of clarity about the problem or the solution, the work expands into sociopolitical and psychological purposes and becomes both technical and interactive. (SLD)

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A Discussion of

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Clinical Context of Evaluation: Interaction of Evaluation with Situation Types and Stages of Problem Solving

As evaluators we work in a context of people, leaders, stakeholders, situations. Like researchers, evaluators should seek to identify the elements of the context in which they work. Unlike researchers, who seek to separate from the context in order to gain new, generalizable knowledge, evaluators must embrace the context in order to provide the specific knowledge/information necessary to meet the needs of the stakeholder client.

The purpose of this presentation is to examine the setting of evaluation from the perspective of the types of situations and the stages of problem solving wherein institutional leaders might be calling for the assistance of evaluators. As a result of this examination evaluators would have a framework for understanding and adjusting their interactions with the environmental context of the evaluation.

For the purpose of this discussion, situational types, as defined by Ronald Heifetz in Leadership without Easy Answers, will be utilized. In his delineation situation based issues revolve around the clarity or lack of clarity of the problem facing the institutional leader and the clarity or lack of solution and implementation procedures for the solution. Heifetz posits three types of situations for leaders based on these aspects:

Type I: the problem is clear and the solution and implementation are also clear (that is, neither requires adaptation or learning). The identification of the problem and the solution and implementation of the solution are essentially technical operations. The leader and those led have seen the problem before and worked out acceptable ways for resolving the problem. The leader's role essentially is to define the problem and implement protocol(s) already developed to resolve the problem.

Type II: the problem is clear but the solution and implementation are unclear (that is, the solution and/or implementation requires adaptation or learning). In this type the problem is definable but protocols for resolving the problem have not been worked out. The leader may have ideas about the solution but acceptance and

implementation of the solution requires that those led—and perhaps the leader as well—have to change/adapt in some way. The leader may have a technical fix (that is, be able to spell out what ought or can be done to resolve the problem) but those being led control acceptance and implementation of the problem solution.

Type III: the problem is unclear (it requires adaptation or learning in order to identify the problem) and the solution and implementation is unclear, also. In Type III situations the problem is not clearly definable and when it is defined, protocols for fixing it do not exist. Adaptation and learning is required both to define the problem and to determine and implement a solution to the problem. (Heifetz, 1994)

According to Heifetz, administrative leadership behaviors should differ based on the situation. Where the problem, solution, and implementation are clear, the appropriate behaviors would include providing the problem definition and solution, protecting followers from outside threats, restoring order, and maintaining group/institutional norms. Where the problem, solution, and/or implementation are unclear, the appropriate behaviors include identifying the learning challenge, diagnosing conditions, asking questions about problem definition and solutions, disclosing external threats, expose conflicts, and either challenging group/institutional norms or allowing them to be challenged.

Switching now to problem solving processes, in attempting to deal with all types of problem situations, administrative leaders have available a variety of problem solving schema. For the sake of this discussion a problem solving process with five major steps—and in which the fifth step has four substantive sub-steps—is utilized.

1. Problem Definition—processes that result in clarifying both what the problem is and is not with the goal of identifying the problem underlying the symptoms that have raised the issue to the attention of the institution.
2. Team Creation—putting together a team of people who have the knowledge, skills, and institutional influence or "reach" to resolve the identified problem. Alternatively, the

team might be established prior to the problem's clear definition; in that case, the team must be able both to define and to resolve the problem.

3. Analysis of Causes—processes that lead to a determination of potential causes for the problem with the goal of identifying the root cause of the identified problem.
4. Solution Identification—processes that identify the available solutions/responses to the root cause with the goal of determining the best solution for the current situation.
5. Plan and Make Changes—processes that begin with the identified best solution and move to its institutionalization, assuming, of course, that it resolves the identified problem. This stage has four major sub-steps.
    a) Plan the Change—identifying and laying out the tasks that must be done for the identified best solution to move from idea to reality. Its product would normally be an action plan detailing who does what, when, and with what resources.
    b) Pilot the Change—a process of trying out the proposed solution in a limited, somewhat controlled environment for the purpose of determining if it works, how well it works, and what adjustments to the plan might be needed before full implementation takes place.
    c) Check the Change—evaluation processes to determine how well the pilot worked with the goal of determining whether to go forward and institutionalize the change, adjust the plan is some significant way(s), or to revisit the solution identification stage of the problem solving process.
    d) Institutionalize the Change—processes that move the change from outside the systems of the institution to becoming a permanent part of the institutional system.

In addition to situation types and the problem solving process, a third aspect of situations in which institutional leaders might/would seek the assistance of evaluation experts lies within the definitions and purposes of evaluation. Three typical definitions of evaluation are presented across

the literature: (1) it is the determination of the extent to which program goals have been accomplished; (2) it is the provision of descriptive information to decision makers; and (3) it is judging the merit or worth of a program or its components.

Within each definition, a variety of purposes can motivate the actions of evaluators. The most commonly noted purposes are summative and formative evaluations. In summative evaluation the purpose is to contribute to decisions about program installation, continuation, or expansion. Formative evaluation seeks to contribute to decisions about program modifications. Two additional purposes tend to be of importance to institutional leaders: psychological or sociopolitical purposes and the exercise of authority. Psychological or sociopolitical purposes revolve around efforts to motivate desired behavior by the people in the program being evaluated. It contributes to the dynamic tension necessary to produce learning and change in behavior. Obtaining evidence that rallies support or opposition for the program is one way this purpose is fulfilled. Lastly, there is the need or desire of the institutional leader to exercise his/her authority. Put simply, the evaluation is made to happen to demonstrate the leader's ability to make it happen. (Nevo, 1990)

When the institutional leader initiates a problem solving process, the leader has need of evaluation services that are primarily formative both in the operation of the problem solving process and in addressing the problem that was the impetus for invoking the problem solving process. Within the problem solving process, evaluators can contribute at each step although the characteristics of the contributions change from step to step.

Problem definition might have begun with the results of an earlier evaluation cycle. In that sense the problem solving process is the product of evaluation; it is an action to resolve some weakness identified in a prior evaluation event. Beyond that, once the problem solving process is begun, evaluation processes can be used to confirm the existence of a gap between reality and potential in the identified area. Where a gap is confirmed, evaluation can provide information about the size of the gap. This is useful since the existence of a large gap offers the possibility of significant benefit from effort and resources applied to closing the gap while a narrow gap might indicate that,

although the gap is real, the institution's time and resources might achieve more cost effective returns in other areas. For example, if the results of the sixth grade proficiency tests show 20 students out of 200 have not passed the math portion and 100 out of 200 have not passed the reading portion, the expenditure required to get the last 20 students to pass the math would probably have a greater return on effort if it were applied to the 100 students who had not passed the reading portion.

Also in the problem definition stage, evaluators can help to determine one or more means for noting and/or measuring success. Perhaps the same methods that enable the institution to determine there is a gap between the reality and potential can be used to identify milestones of progress toward complete success. More likely, the evaluator would be able to assist the institutional leader to identify a level of success realistic for the resources able to be committed to the solution of the problem. In a sense, the evaluator helps the institution to recognize its limits given the current situation. This can assist the institutional leader in moving the institution toward a revision of its priorities as a means to address the problem in a more substantive way than the status quo would allow.

Team creation offers several ways for evaluators to be of assistance. The evaluator can examine the problem, however delineated at this point in the process, and help to identify the human resources—knowledge, skills, authority, and influence—necessary both to clearly identify the problem and to resolve it. Additionally, resources external to the team can be evaluated both as to their availability and their potential for resolving the problem at hand. These resources might be external to the team but internal to the institution, or they may be external both to the team and the institution.

Analysis of causes would benefit from the assistance of an evaluator in two ways. First, the evaluator could work with the team to identify likely root causes of the problem. That is, the evaluator can help the team move beyond the visible, surface symptoms of the problem and track back to a cause that, if treated, could eliminate the problem altogether. Normally, this would be preferable to attacking the symptoms, reducing or removing them for the immediate present only to

have them reoccur, probably at the most inopportune time possible. Secondly, the evaluator can help the team by developing a means to verify that the suspected root cause actually exists and is the root cause of the undesirable symptoms.

Solution identification follows the determination of root causes. Typically many solutions are brainstormed in the problem solving process, and the key is to find the one that best fits the context of the situation. Evaluation processes can help the team to define the criteria of the ideal solution and then to evaluate the alternative solutions against the identified criteria. In carrying out this work, the team and even more, the evaluator must be cognizant of the entire institution as a system. It is important to have a sense of the level of change the solution will require of the institution. The deeper and more profound the change, the more costly in social capital will be the implementation of the solution. That, in turn, requires an understanding of how much change the institution can stand in its current state and in a later state, after some level of preparation.

Planning and making the change involves four major activities: (1) design the change, (2) pilot the change, (3) check or evaluate the change, and (4) act or institutionalize the change.

During the process of designing the change, evaluation can play a role in the identification of the major steps that necessary to bring about the change. Forms of process evaluation would be useful to the planners. Related to that is generating a process to monitor the planned changes. The major steps could well be the progress milestones of the plan, so developing the data collection and analysis that would enable the implementers to track progress and adjust the plan would enable the institutional leaders to carry out the plan as designed or as adapted to fit changed circumstances.

Pilot the change has several points where an evaluator can be of assistance. First lies in determining whether a pilot implementation would be beneficial or a misuse of time and/or other resources. Second is to assist in the decision about where the pilot could be implemented with meaningful effect.

Once the pilot is set into motion, the next set of actions are essentially all evaluative. It is necessary to monitor the progress of the pilot and to determine its effectiveness. Evaluation

opportunities and needs exist at nearly every point in the pilot process. To what extent does the planned pilot program embody the theory or ideas of the full program? To what extent has the pilot been implemented as planned? What are the outcomes being produced by the implemented pilot? How effective is the pilot at producing the outcomes? How does this relate to the expected outcomes? What lessons does the pilot offer toward improving the program and/or its implementation? Are the outcomes worth the cost? In short, this stage potentially involves every type of evaluation activity. Finally, evaluation assists in making the summative decision, should the proposed solution be implemented in full flower?

At the point the decision is to fully implement or institutionalize the solution, evaluation's role shifts to formation. Now the evaluator helps to identify the training needed in order to bring permanence to the solution. This is coupled with the need to identify systemic changes that are needed for the solution to be institutionalized. Among the systemic changes would be the identification and implementation of checks and controls that verify the solution is and continues to be active. Aspects of the solution are noted, counted, or measured when active both to assure that they are present and to symbolize the institutional intention to make them permanent. Finally, evaluators can help to determine the effectiveness of the institutionalized solution. In a sense, the evaluation cycle begins anew.

To help visualize these relationships, the chart, Evaluator Function and Purpose in Various Circumstances, is inserted below. In this chart, the problem solving process moves from the center of the chart up to the top (from Problem Identification to Act/Institutionalize). Four purposes of evaluation lie below the center of chart. In the center, moving from left to right, are the three situation types defined by the clarity of the problem and the solution/implementation. Each type is further divided into problem and solution. Where the situation type and the problem solving steps intersect, codes have been entered to reflect the evaluator's role. Where it is primarily one of technical assistance where the product of the evaluation is based on evaluation techniques and knowledge and the effects of interaction with stakeholders is incidental to the product, "T" is entered.

Where the effects of interaction with the stakeholders is integral to the product or benefit to the adaptive needs of the institution, "I" is entered. The "I" code does not mean technical skills are not needed; it means that the product that benefits the institution is drawn from the evaluator's skills and processes in interaction with the stakeholders as well as from technical skills and knowledge. The level of technical skills needed might be even higher than where "T" is coded, since they must be exposed or practiced in a visible, open setting. Where no major benefit seems present, the cell is left blank.

In the lower part of the chart, the coding is "P" for primary purpose and "S" for secondary purpose, and blank where the purpose does not seem needed. The line labeled "Exercise Power" is coded with a "U" where showing the decision maker's authority has potential utility, under certain circumstances, in the move to bring about adaptive change in the institution. For example, where the problem and/or the solutions are unclear and the stakeholders believe the authority figure is doing nothing, authorizing an evaluation could be a means to contain or reduce the tensions of the moment, buying time to get processes moving toward clarifying the problem and/or solution.

Moving now to the consideration of how these three factors intersect affect the role of the evaluator. With the Type I situations, both problem and solution clear, the institutional leader, that is, the person in authority, the decision maker, is the client for the services of the evaluator. In the phase of problem definition, the evaluator's role would be threefold, (1) to verify and establish the parameters of the problem, (2) to determine if the/an existing team has the means to resolve the problem, and (3) to determine the potential for external resources to contribute to the resolution of the identified problem. In short, the evaluator checks to confirm that the problem is what it is thought to be. This can be identified as a formative evaluation function, assisting toward the implementation of processes for resolving an essentially unquestioned problem.

Similarly, the evaluator's role in the implementation of the solution is essentially formative. A solution or a variety of solutions are already known and generally acceptable to the institution. The evaluator can engage in four contributory ways: (1) to identify criteria for selecting among existing

Evaluator Function and Purpose in Various Circumstances

Problem Solving	Act/Institutionalize		T		I		I
	Check/ Evaluate		T		I		I
	Do/Pilot		T		I		I
	Plan		T		I		I
	Solution Identification		T		I		I
	Analyze Causes		T		I		I
	Team Formation	T	T	T	I	I	I
	Problem Identification	T		T		I	
TYPES		Problem Clear **I** Solution Clear		Problem Clear **II** Solution Unclear		Problem Unclear **III** Solution Unclear	
Evaluation Purpose	Summative		S		S	S	S
	Formative	P	P	P	S	S	S
	Psychological Sociopolitical				P	P	P
	Exercise Power				U	U	U

T Technical Assistance Primary

I Interactive Assistance Primary

P Primary Purpose

S Secondary Purpose

U Potential Utility in the Change Process

solutions, (2) to identify mileposts and a monitoring process for solution implementation, (3) to verify that the implementation is being accomplished as planned, and (4) to verify that the objectives of the implemented solution have been met.

So in Type I situations the evaluator is engaged in primarily formative purposes. He/she uses technical skills related to evaluation to confirm the shape the problem to the decision maker and to inform the decision maker of the progress of the solution being implemented. There is the additional benefit of documenting the process for any accountability purposes that might exist within or without the institution, but the work is essentially formative and technical. The effect of the evaluators contacts with the stakeholders is immaterial to the adaptive process.

The Type II situation is a mixed bag. The problem is clear—there is agreement and acceptance both that there is a problem and what it is. The solution, on the other hand, is not clear—there is not agreement or acceptance about how to resolve the problem. In terms of problem definition, Type II is the same as Type I. The person in authority, the decision maker, is the institutional leader and the tasks for the evaluator are to verify and establish the parameters of the problem. Slightly different, though, are the tasks related to the team and to external resources. Here, with the problem clear and verified but the solution not clear, the evaluator's task in problem definition expands to include determining desirable characteristics and/or talents needed on the team assigned the task of developing an as yet unknown or unclear solution. Then the evaluator determines if the identified/existing team meets those criteria. The evaluator's task related to external resources would be in the same vein, determine desirable characteristics of potential external resources and then determining if the presently available external resources meet the criteria. The uncertainty of the solution affects the work of the evaluator by reducing the level of certainty in identifying the team and external resources, yet the client is still the institutional leader who needs essentially formative and technical information.

To this point the work of the evaluator has been essentially transactional. That is, the institutional leader and the stakeholders in the institution came to grips with the type of problem at

some earlier time and worked out mutually acceptable ways of disposing of the problem. The evaluator has provided essentially technical services to a client that is informed and accepting about the situation. The leader sees to the implementation of the anticipated solution. The evaluator assists the leader is this, providing information supportive of both the problem identification and the solution implementation. The evaluator is not seeking to change either the leader's or the stakeholders' view of the problem or their mutually acceptable solution.

On the other hand, with the solution and its implementation unclear, the evaluator becomes part of the process to generate new knowledge or new ways to respond to a problem, that is, the a new protocol for dealing with this new or unresolved problem. This means the evaluation process has a psychological or sociopolitical purpose, that is, to contribute to obtaining the stakeholders' acceptance of the new protocol. In this context there are more actions to be taken to generate a solution than when there is an institutionally accepted protocol for resolving this clearly identified and accepted problem. Intertwined in the technical aspects of solving the problem, there is the need to develop the acceptance or will to implement the newly developed solution. Here the effects of the evaluators interactions with the stakeholders plays a role that is likely to be larger than that played by the evaluation report(s).

The evaluator can begin the process with a determination of causes. However, instead of independently searching out causes of the identified problem and authoritatively presenting them, the evaluator helps the institutional leader in the adaptive change process by involving stakeholders in processes that enable them to establish both the complexity of causes and the root causes. The evaluator educates them to go beyond treating the symptoms.

With causes and root causes in hand, the evaluator can work with the stakeholders to develop criteria for the resolution of the problem. There may be a need to work through criteria for the ideal solution and for a solution that all can live with before settling on the criteria that will be applied to the evaluation of the potential solutions once they are generated. Once the criteria are established, the

evaluator can assist the stakeholders by gathering information about the various solutions proposed by the stakeholders or by others external to the institution.

After a solution is identified for the problem, the evaluator can assist the stakeholders by helping them identify the major milestones of an action plan to implement the solution. This would go hand in hand with developing a plan to monitor the implementation of the plan. If the plan requires a major investment in time, money, or personnel to fully implement, the evaluator can assist the stakeholders work through a pilot process, providing information about where the pilot could be meaningfully implemented and monitor the progress and effectiveness of the pilot. This information could also be developed and presented to the stakeholders so that they can decide if the piloted change is ready for institutionalization.

If the stakeholders decide the proposed solution is not ready for full implementation, the evaluator helps them identify what needs improving before full implementation is judged acceptable. If the plan is deemed ready for full implementation after the pilot, the evaluator can assist by verifying to the stakeholders and leaders that the institutionalization is proceeding as planned and the extent to which the objectives of the institutionalization have been met.

In all of this process, there are two keys: the technical knowledge and skills of the evaluator and the interaction of the evaluator with the stakeholders. The technical skills have to do with the quality of the evaluative components of the evaluation. The interaction has to do with changing the behaviors of the stakeholders, with moving the stakeholders to accept the changes that the new solution to this problem will bring. It's about enabling the stakeholders to adapt, about the sociopolitical and/or psychological purpose of the evaluation.

Moving to the Type III situation, both the problem and the solution are unclear to the stakeholders including the institutional leader. As with the unclear solution to the clear problem in Type II, that which is unclear requires more of the evaluator both in technical and interactive skills because the purpose is more than formative or summative. The evaluator has to assist the institutional leader to make the problem clear not only in the leader's mind but also in the minds of the various

stakeholders. This begins with getting the stakeholders to delineate the current situation and then spotlighting information for the stakeholders in such ways as would enable them to view the current situation from several perspectives.

Once there is some coming into focus about the current situation the evaluator can elicit characteristics of the desired situation. With these two aspects taking shape, each can be used to sharpen the other by helping the stakeholders work on contrasts between the current situation and its underlying values and the desired situation and its underlying values. When this gap evident and accepted by the stakeholders, the evaluator might be done with this phase. However, if the stakeholders simply accept that there is a gap and view it as insoluble or see only old problem resolution protocols as appropriate, the problem is not clear enough to resolve. In this situation the evaluator needs to assist the stakeholders to see the problem so clearly that they see both the need for new responses and the potential for responses as within the capacity of the institution. They need to develop an institutional sense both of need and of capacity to change. Among the tasks that the evaluator could use to build this clarity are having the stakeholders determine a means or criteria for measuring movement toward resolution, the knowledge and skill resources that would be necessary to resolve the problem, and the existence of any of that knowledge or skills within the institution or readily available from external sources.

With the problem brought into focus and the solution and its implementation as yet unclear, the problem has become like a Type II problem. The evaluator has formative and/or summative evaluation work to do along with meeting the psychological and sociopolitical needs of the institution. As above, the evaluator would work to enable the stakeholders to understand and accept the causes and root causes of the problem, to develop criteria for acceptable resolution of the problem, to sort thorough potential solutions, to plan a process for monitoring the implementation of the selected solution, to help locate, monitor, and evaluate a pilot of the solution, and to develop information related to the institutionalization of the solution.

In summary, evaluators have different roles to play within the institutional setting of their work and those roles depend on the institutional setting. Where there is clarity about both the problem and the solution to the problem, the work is within purposes that are summative and/or formative and hence basically technical. Where is there lack of clarity about the problem and/or the solution, both in terms of what it is and how to implement it, the work expands into sociopolitical and psychological purposes and becomes both technical and interactive.

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